AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 13, line 23 with the following rewritten paragraph:

-- The ratio of $TiCl_4$ vapor to water vapor which ~~are~~ is fed is preferably such that the ~~$H_2O/TiCl_4$~~ $TiCl_4/H_2O$ molar ratio is in the range of from 0.05 to 4. If this molar ratio is less than 0.05, the proportion of $TiCl_4$ is so small that the rate of film formation is decreased. If this molar ratio is greater than 4, the proportion of $TiCl_4$ which is consumed for the formation of a powder product in the gas phase is increased, so the utilization factor of $TiCl_4$ is decreased and the amount of a powder product deposited on the substrate is increased, resulting in worsening the appearance of the film product. The above-described molar ratio is preferably in the range of from 0.1 to 3 in order to make it possible to carry out film formation more efficiently. --

Please replace the paragraph at page 16, line 1 with the following rewritten paragraph:

-- The $TiCl_4$ vapor and the water vapor were diluted with argon and dry air, respectively, to form each into a diluted vapor having a concentration of 3%, which was used for injection. The atmosphere in the tube before injection of the vapors was an argon atmosphere. The temperature of the substrate was made 180 °C by heating the tube at 180 °C with an external heater. In order to prevent condensation of the $TiCl_4$ vapor and the water vapor, each diluted vapor was heated by heating its feed pipe to the inlet of the quartz tube at 60 °C. The two nozzles were tilted at such angles that the vapor streams injected therethrough met each other in the quartz tube, and the flow rates of these vapors injected through the respective nozzles were adjusted to give a $TiCl_4/H_2O$ ~~$H_2O/TiCl_4$~~ molar ratio of 0.5. --

Please replace the paragraph at page 19, line 4 with the following rewritten paragraph:

-- Vapor deposition and calcination were carried out in the same manner as in Example 2 except for the following points. In this example, the temperature of the substrate was 180 °C, which was the same as in Example 1, but the ratio of $TiCl_4$ vapor to water vapor injected into the quartz tube ($TiCl_4/H_2O$ ~~$H_2O/TiCl_4$~~ molar ratio) was varied.--

Please replace Table 3 with the following rewritten Table 3:

Table 3

$TiCl_4/H_2O$ ~~$H_2O/TiCl_4$~~-molar ratio	Rate of aldehyde decomposition [ppm/min]	Rate of film formation [nm/min]
0.1	0.79	50
0.5	1.95	200
1	1.56	150
2	1	130
3	0.85	110
5	0.79	75
10	0.83	50

Please replace the paragraph at page 19, line 21 with the following rewritten paragraph:

-- As can be seen from Table 3, at a $TiCl_4/H_2O$ ~~$H_2O/TiCl_4$~~-molar ratio of 5 or greater, the rate of film formation decreased. In view of the rate of film formation and the photocatalytic activity, the molar ratio is preferably 3 or lower, and in particular, at a molar ratio of about 0.5, both the rate of film formation and the photocatalytic activity were highest.--

Please replace the paragraph at page 19, line 28 with the following rewritten paragraph:

-- Vapor deposition and calcination were carried out in the same manner as in Example 2 except for the following points. In this example, the temperature of the substrate was 180 °C, which was the same as in Example 1, but the concentration of $TiCl_4$ in the diluted $TiCl_4$ vapor injected into the quartz tube was varied in the range of from 0.05% to 20%. The H_2O concentration in the diluted water vapor was also adjusted such that the $TiCl_4/H_2O$ ~~$H_2O/TiCl_4$~~-molar ratio was 0.5.--

Please replace the paragraph at page 21, line 4 with the following rewritten paragraph:

-- $TiCl_4$ vapor was injected through the upper nozzle 5, and water vapor was injected through the lower nozzle 6. Both vapors were diluted vapors having a 2%

concentration of $TiCl_4$ or H_2O diluted with argon for the $TiCl_4$ vapor and dry air for the water vapor. The amounts of the vapors injected for vapor deposition were adjusted to give a $TiCl_4/H_2O$ ~~$H_2O/TiCl_4$~~-molar ratio of 0.5. The flow rate of each vapor was the same in all the test runs. The temperatures of the injection nozzles and of the inside of the vapor deposition chamber were all 180 °C.--

Please replace the paragraph at page 23, line 19 with the following rewritten paragraph:

-- As can be seen from Table 5, in a conventional method of Run No. 13, although the speed of movement of the substrate and the flow rate and angle of injection of the $TiCl_4$ vapor were the same as in the other test runs, the uniformity in a transverse direction was poor and the photocatalytic activity was also very poor. It is thought that this is because direct supply of water vapor to the atmosphere in the chamber fails to maintain the $TiCl_4/H_2O$ ~~$H_2O/TiCl_4$~~-molar ratio at the surface of the substrate within a suitable range, and the ratio may be excessively high or low in some areas, thereby interfering with the uniformity in film formation. --

Please replace the paragraph at page 24, line 5 with the following rewritten paragraph:

-- In contrast, in Runs Nos. 1 – 12 according to the first invention in which both the $TiCl_4$ vapor and water vapor were injected through respective injection nozzles with a $TiCl_4/H_2O$ ~~$H_2O/TiCl_4$~~-molar ratio of 0.5 such that the time elapsed from mixing of the vapors until contact of the mixed vapors with the substrate was at most 1 second, a significantly improved photocatalytic activity was obtained compared to Run No. 13. --